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INCREMENTAL STEP DRILLING SYSTEM AND METHOD Weber et al.

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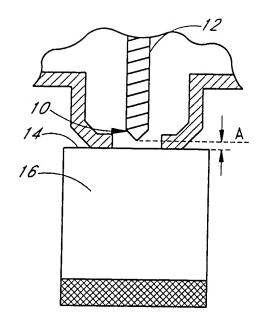


FIG. 1A (PRIOR ART)

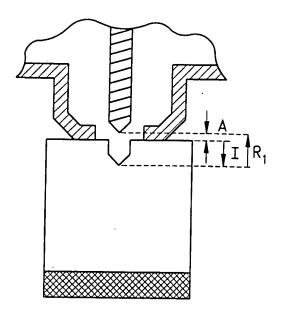


FIG. 1B

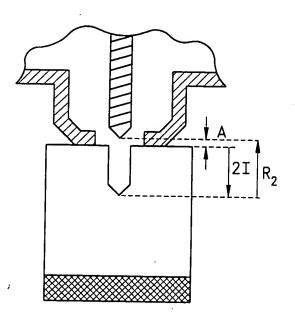


FIG. 1C (PRIOR ART)

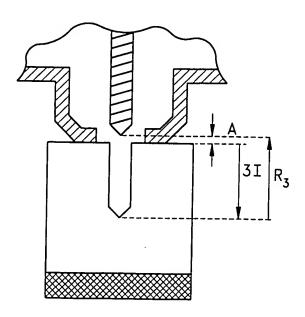
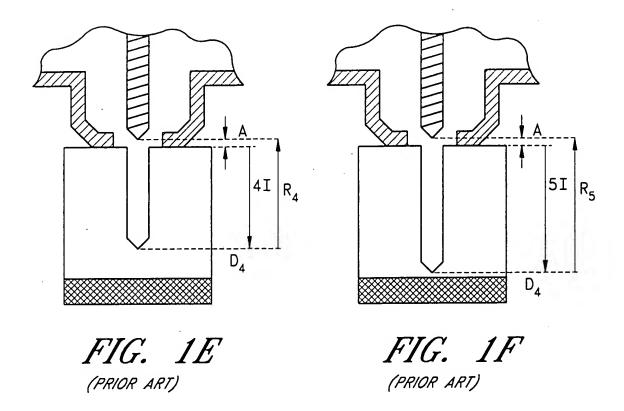
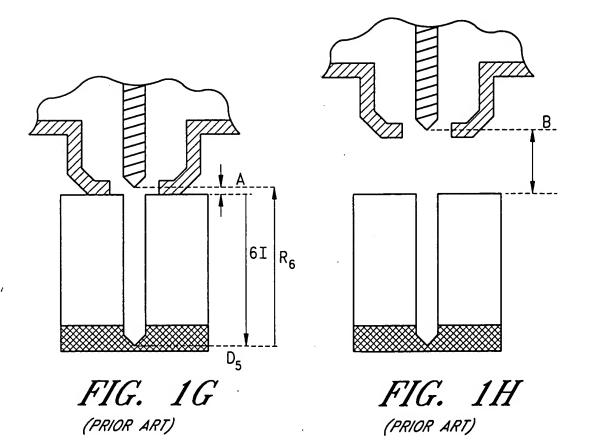


FIG. 1D (PRIOR ART)

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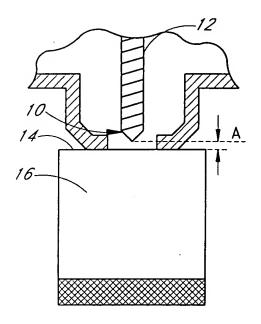


FIG. 2A

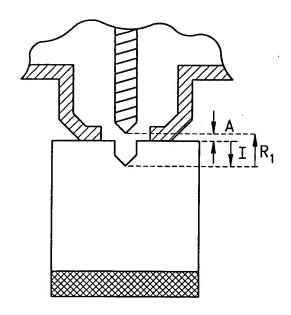


FIG. 2B

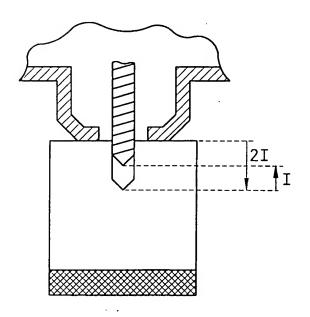


FIG. 2C

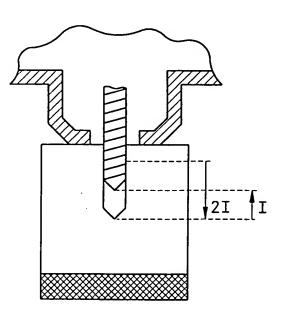
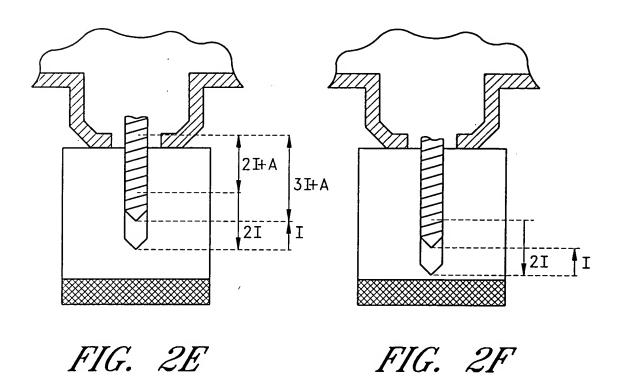
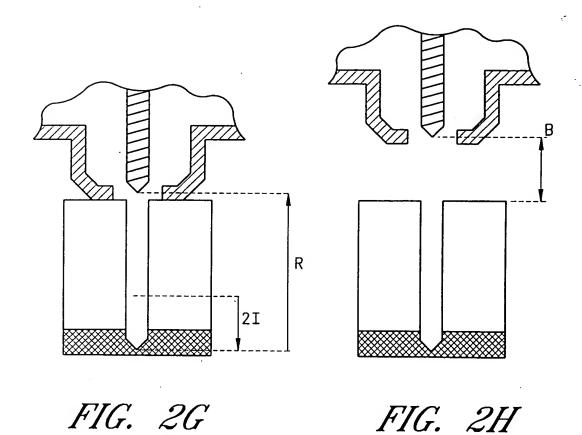
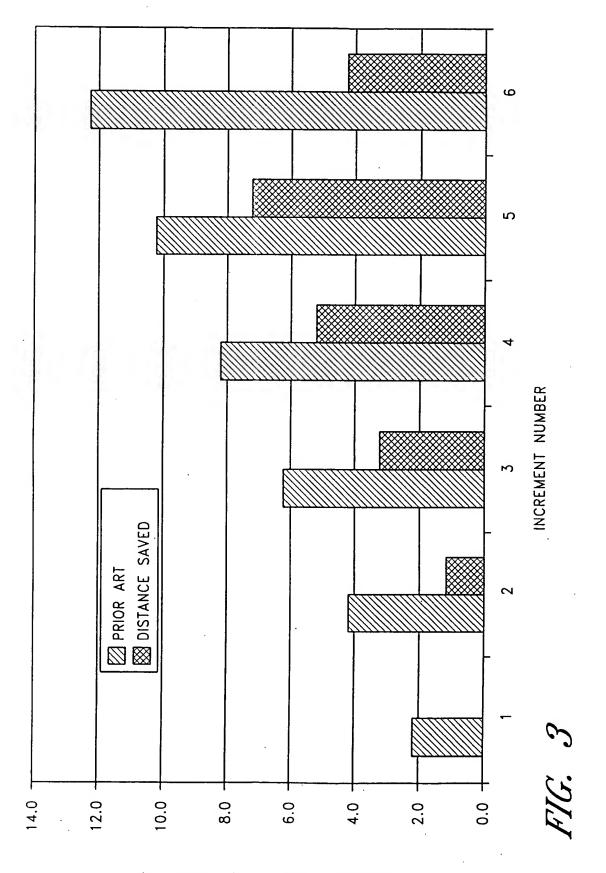


FIG. 2D

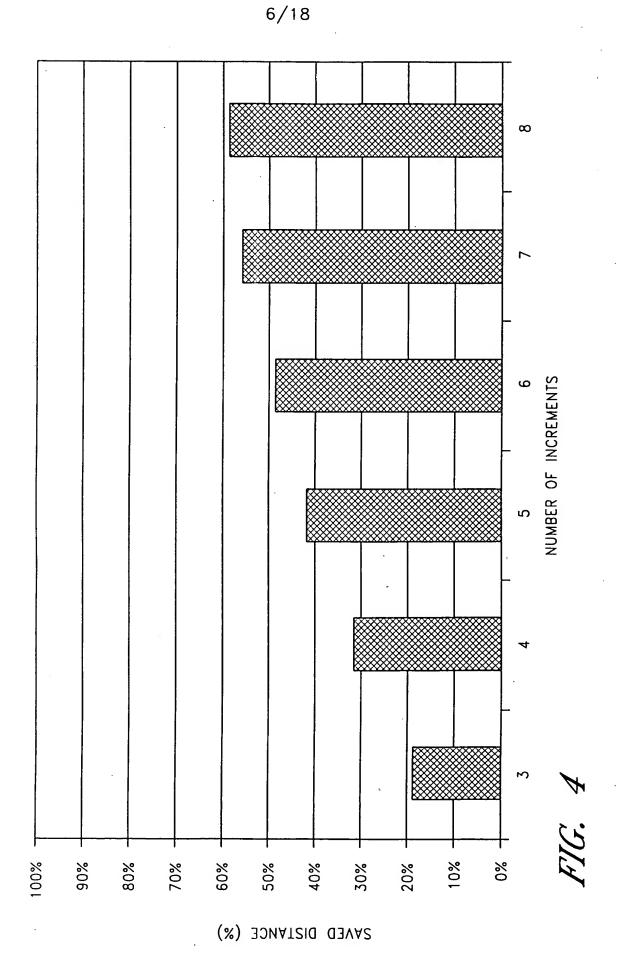
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DISTANCE TRAVELED (INCREMENTS)



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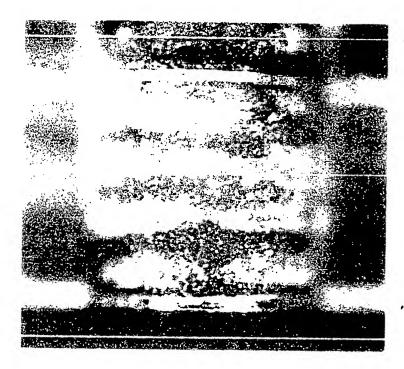


FIG. 5A (PRIOR ART)

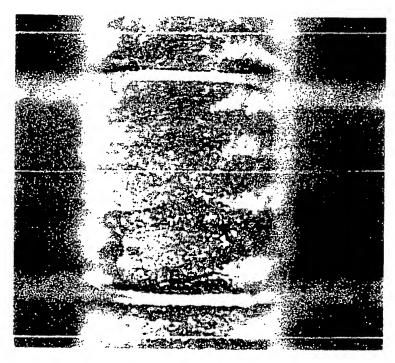


FIG. 5B

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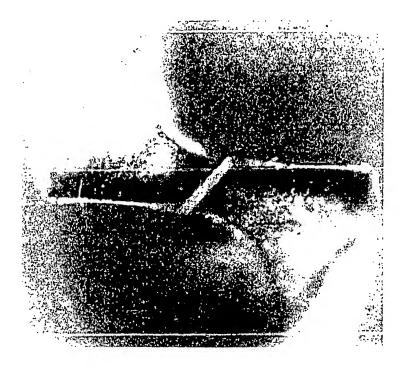
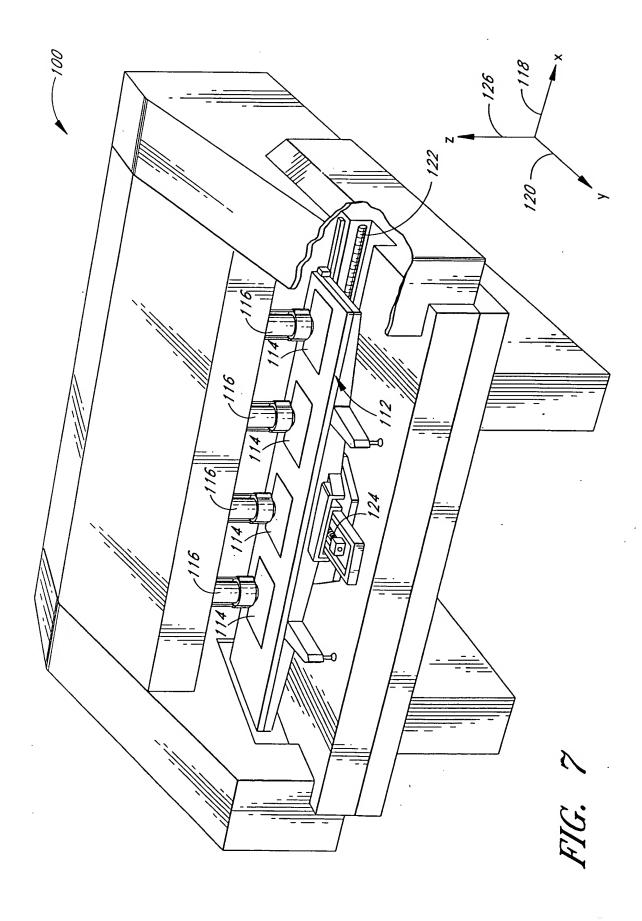


FIG. 6A (PRIOR ART)

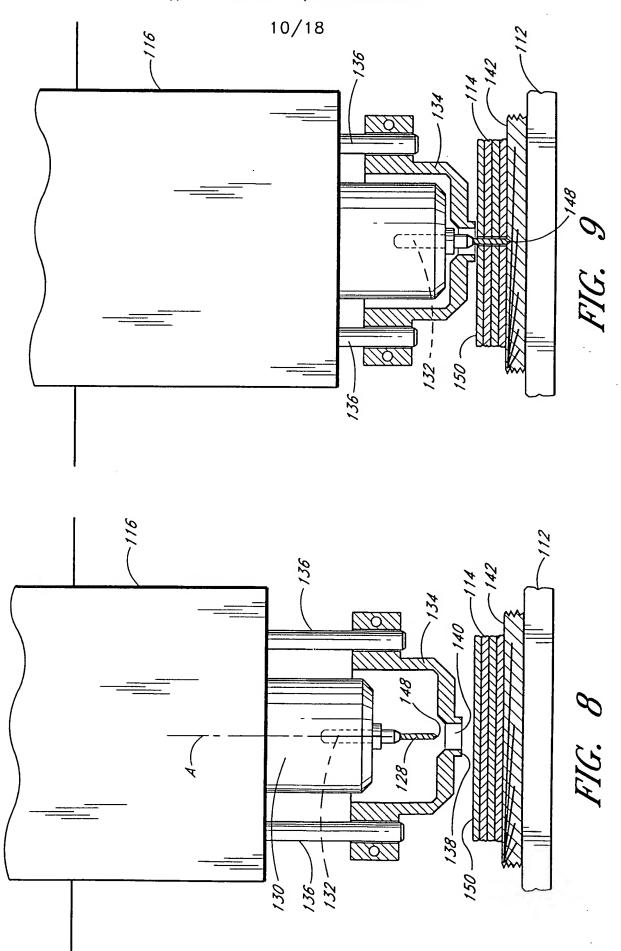


FIG. 6B

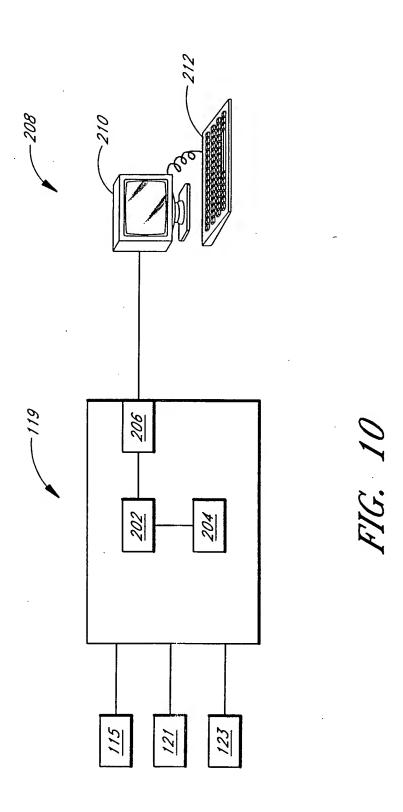
BEST AVAILABLE COPY



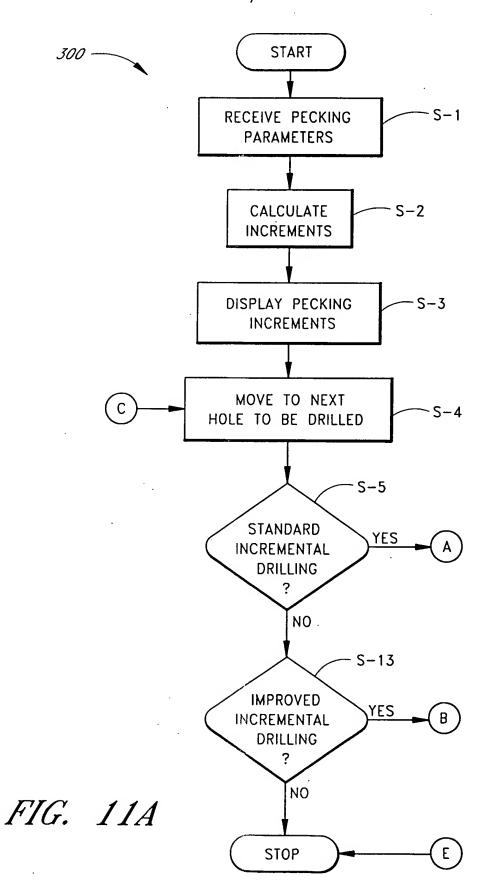
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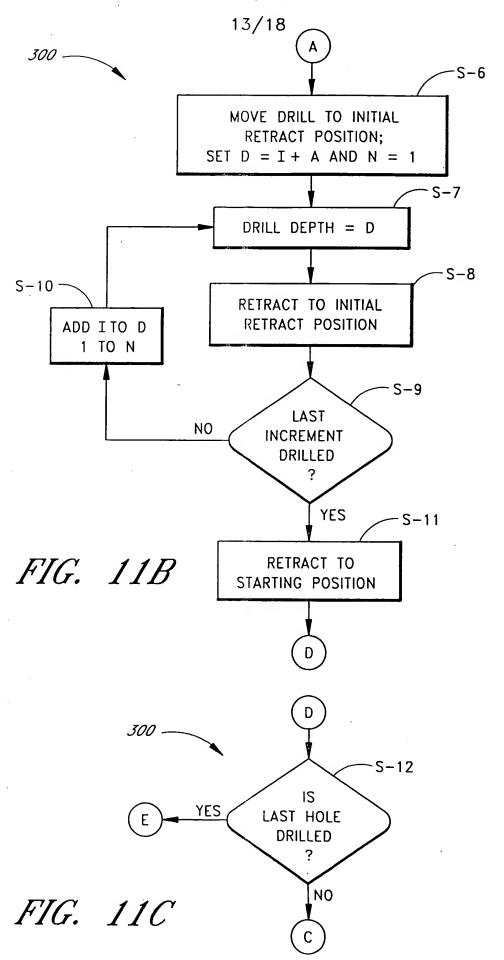
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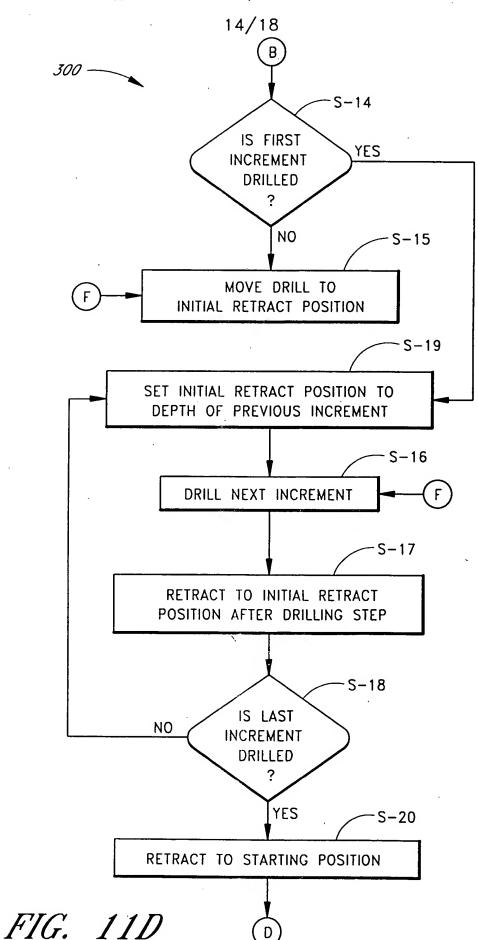
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Appl. No.: 10/041,767 Atty Docket: EXCLN.098A

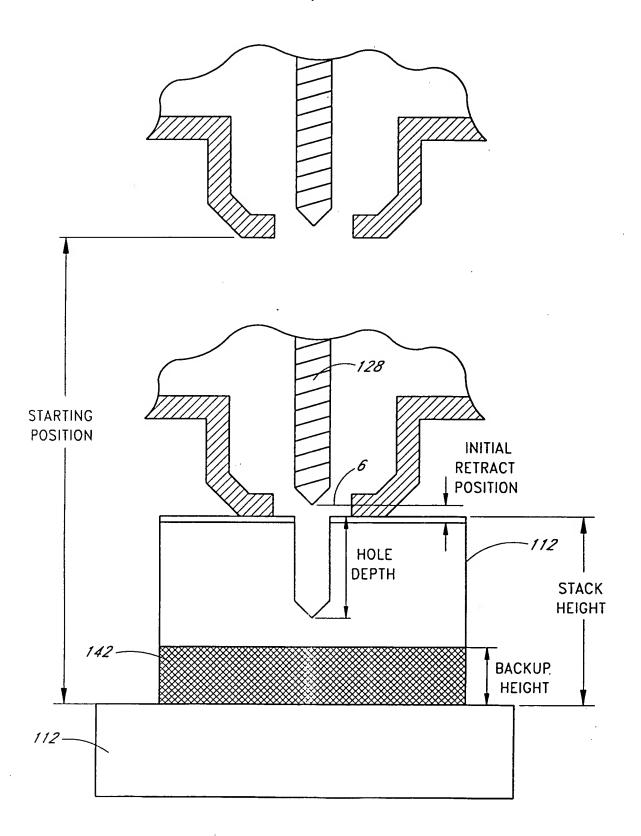


FIG. 12

					3020 -	00	1	31,	3180	3200
				PEC	K DRIL	FING	PECK DRILLING SETUP PAGE	PAGE		
		PECKING STATUS	PECK TOOLS	STACK HEIGHT	NO. OF PECKS	UPPER LIMIT	2nd UP LIMIT	LOWER LIMIT BOFS	.0000	MINIMUM STROKE
	3040 —	NO /	01	.2640	٤	.300	.015	FINAL DEPTH	590.	.005
3	G. 134	3060		3100 3	3120	3140	3160	o 322a ·		3240
				SHOWS	HF INCRE	MENTAL	IOI F DEPTH	SHOWS THE INCREMENTAL HOLF DEPTH PER PECK		

	T	T	_	г	1	Τ	ī	_	Ι
	∞								089
关	7							089	011 022 033 045 056 067 078
PER PEC	9						089	076	067
E DEPTH THE STA	5					089	074	064	056
INCREMENTAL HOLE DEPTH PEFROM THE TOP OF THE STACK	4				089	071	690'-	051	022033045056067
SHOWS THE INCREMENTAL HOLE DEPTH PER PECK FROM THE TOP OF THE STACK	М			089	/90' -	053	045	038	033
IOWS THE	2		089	059	045	036	030	025	022
S	-	089	045	030	022	018	015	013	011
PECK	UEPIH	1	2	3	4	5	9	7	8

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				36	3026		31	3180	3200
			PEC	K DR	PECK DRILLING SETUP PAGE	SETUP	PAGE		
	PECKING	PECK	STACK		UPPER		2nd UP LOWER LIMIT	/103	MINIM
	STATUS	TOOLS	HEIGHT	PECKS	LIMIT		BOFS	,375	STROKE
3040 —	NO /	01	.7140	∞ ⁻	.800	025	025 FINAL DEPTH	.478	.010
	3060		3100	3120	3140	3160		3220 3	3240
del									

	80								257
					_				
×	7							257	225
PER PEC	9				Θ		257	220	193
INCREMENTAL HOLE DEPTH PE FROM THE TOP OF THE STACK	S					257	214	184	161
NTAL HOL	4				257	206	171	147	129
SHOWS THE INCREMENTAL HOLE DEPTH PER PECK FROM THE TOP OF THE STACK	3			257	193	154	129	110	960'-
OWS THE	7		257	171		064			
HS	ļ	257	129	980'-	064	051	043	037	032
PECK	טכרוח	1	2	3	4	5	9	7	80

FIG. 14B

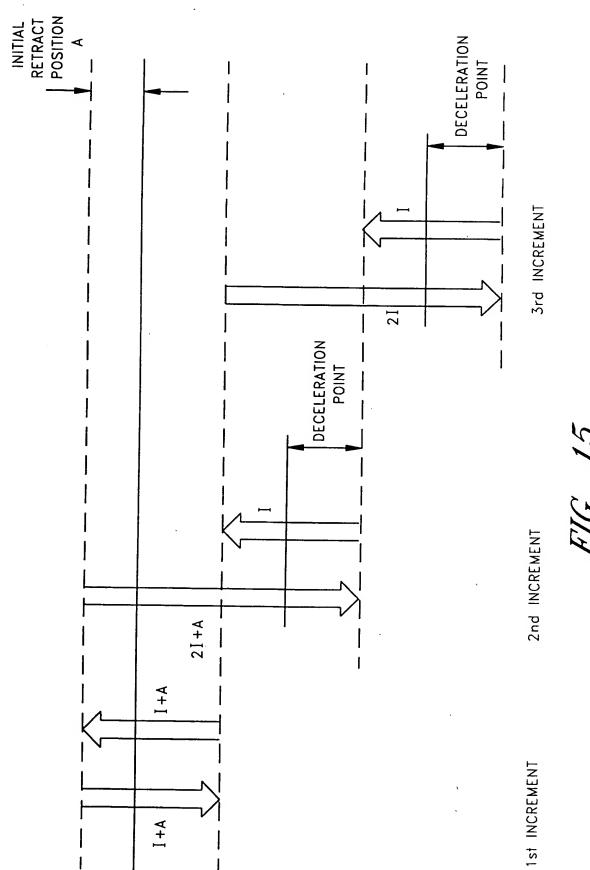


FIG. 15